SITE VISIT REPORT FOR SRI LANKA: STRATEGY FOR HEALTH SERVICES RESEARCH DEVELOPMENT

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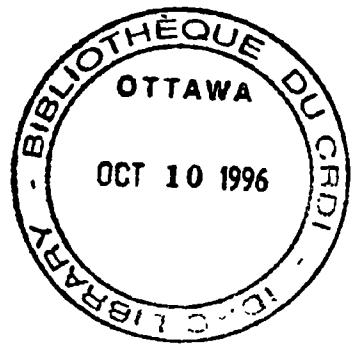

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APPENDICES

1. INTRODUCTION and BACKGROUND

A visit was made to Sri Lanka from February 19-25, 1984, accompanied by Dr. Karl Smith and Dr. Gilles Forget from the IDRC, with the following terms of references:

1. To have technical discussions with health authorities and the research community of Sri Lanka regarding the national programme of health services research in the context of HFA/2000, with primary health care as the key approach.
2. To explore the possibility of IDRC, in collaboration with WHO, to support the health services research programme in Sri Lanka.
3. To develop a suitable general plan of action on collaborative areas identified for further action.

Discussons were arranged by the Sri Lankan government with officials of the Ministries of Health, Higher Education and Plan Implementation, faculty from two medical schools and the National Institute of Health Sciences, and various personnel working in primary health care services. The complete schedule of discussions is provided in Appendix 1. All discussions were held collaboratively with a team from the WHO.

It was clear that the site visit was not the first step in the development of health services research (HSR) in Sri Lanka. With the WHO as a catalyst, the following activities had already been undertaken:

- Preparation of a draft brief on the national programme of health services research that demonstrated government commitment to the concept, recognized the current lack of resources, but did not address the need for an adequate mechanism for the utilisation of the research.
- Formation of a health and medical research standing committee under the inter-sectoral National Health Council (See Appendix 2 for organisational

structure). The mandiate of this intermittingly operating committee encompasses all aspects of health research. They have established some motherhood priorities for health services research (See Appendix 3).

- Health services research workshops have been held under the sponsorship of the WHO. These have facilitated the completion of fourteen protocols; however, many of these appeared quite biomedically oriented.
- A special consultant attended the National Institute of Health Sciences (the training centre for primary care personnel) to help faculty develop HSR protocols (these are listed in Appendix 4).
- The introduction in 1980 of a community medicine residency in the Postgraduate Institute of Medicine with the requirement for a research thesis.
- Completion of a small number of HSR projects at the National Institute of Health Sciences, the Family Health Bureau and the Departments of Community Medicine in the medical schools.

Further developments will build on these achievements.

2. NEED for and COMMITMENT to HEALTH SERVICES RESEARCH

The Minister of Health emphasised that cabinet had decided that all health investments in the 1984-1989 period would be in primary health care. However, he also expressed concerns about their ability to monitor and decide value for money in this sector. For instance:

1) At the level of the individual practitioner it was clear that the role of the family health worker - the cornerstone of the primary health care system - has never been evaluated, and significant departures from optimal functioning are occuring e.g. it is not understood why coverage of home visits is very poor.

2) At the local level current data collection is unrelated to management needs, e.g. family health workers are told to ensure target immunization coverage for

their families but there is never an assessment of actual coverage.

3) At the regional level, although future budgets of the 24 admnistrative health districts will be based on the morbidity and mortality status of their populations for specific diseases, the data for these status reports is not widely available.

4) At the Ministry level program decisions have to be made in the absence of supporting research evidence, e.g. they have no information to guide them on their proposed introduction of a referral system to reduce by-passing of local facilities.

The future emphasis on primary health care will require, therefore, an increased HSR capacity if the limited additional (and current) resources are to be used as efficiently as possible. This is fully undestood by the Minister of Health and senior ministry officials who are undoubtedly committed to the development of such a research capacity. They expressed urgency and flexibility in achieving this goal.

3. THE POTENTIAL for HEALTH SERVICES RESEARCH

Three aspects of potential were considered - institutions capable of supporting HSR, resources currently available for HSR and personnel capable of performing the research.

a) Institutions

The relationships between the institutions with a potential role in HSR are presented in Appendix 2. This organizational chart is based on discussions with officials and is divided into ministerial, educational and health structures.

At the ministerial level over-all health policy is set by the National Health Council with politicians as members. This council has a civil service counterpart in the National Health Development Committee whose members are the senior civil servants of health related ministeries. This latter committee has

six standing committees, one of which is responsible for health and medical research. The standing committee on health and medical research has been coordinating HSR activities to date but is limited in its effectiveness by the absence of: full-time secretariat support, representation from primary health care services, resources to support research protocol development and funding, accountability mechanisms to ensure utilization of research results. Nevertheless, the minitry of health would like to see this committee as the coordinating focus of the HSR programme.

In the educational sector the National Resources, Energy and Science Authority (NARESA) coordinates all their research activity (as well as other sectors' activities). Currently the chairman of NARESA is also chairman of the health and medical research standing committee; this standing committee gets its limited administrative support from NARESA. He is also chairman of the Postgraduate Institute of Medicine (responsible for medical shool residency training of physicians). It was clear that while NARESA considers HSR to be important, it is not one of their priority activities and receives minimal attention. The recent introduction of research requirements for community medicine residents under the Postgraduate Institute of Medicine may result in an increased profile for HSR at NARESA, but discussions revealed a biomedical rather than HSR orientation.

This biomedical orientation, with some exceptions, was also encountered in the two visits to departments of community medicine - Peradeniya (Kandy) and Colombo. It was also recognized by various officials who pointed out that "the faculty of medical schools are not well oriented to HSR". It was also of some concern that the senior civil servant in the ministry of higher education seemed to perceive HSR as "para-clinical" research, e.g. anatomy and biochemistry, leading to the need for more laboratory space! Despite this, both departments

were engaged in some HSR projects and had become more aware of the area after the WHO sponsored workshops. Unofficial discussions revealed that the departments at Peradeniya and Jaffna were most favourably disposed towards HSR.

However, very little primary health care training occurs within the medical schools. This activity is undertaken at the National Institute of Health Sciences (NIHS), whose faculty are direct employees of the minitry of health. NIHS is also expected to act in an advisory role to the ministry on HSR-related matters. It is located some thirty miles from Colombo in Kalutara and trains assistant medical practitioners (2 1/2 years), family health workers (1 1/2 years), public health inspectors (1 year) and public health nurses (1 year); it also provides a one month orientation to the small number of physicians who become medical officers of health. Some HSR projects have been completed by NIHS faculty, e.g. assessment of ante-natal care coverage, decision-maker on health in family units, acceptability of food supplements, nurses attitudes towards patients in hospital; these projects have been completed despite the overwhelming training responsibilities at the NIHS and limited support services. Planned HSR projects for the future are listed in Appendix 4. The NIHS is being developed to provide basic primary health care to the whole population without great reliance on physician providers (USAID is providing $2.2 million and UNICEF, UNDP and WHO are providing a further $1.6 million support to the NIHS).

Three other primary health care facilities are affiliated with the ministry of health. The epidemioloty unit, located within the ministry, appears to have a staff of only one epidemiologist but was not properly assessed during the site visit because our discussions with this facility were cancelled. The remaining facilities - the family health bureau and the health education bureau - are service-oriented, although the former is performing some HSR for the management of their services. The family health bureau is receiving significant

project-specific support from UNICEF and other NGOs and considers its current research load to be close to its capacity for such activity, (a list of these projects is provided in Appendix 5). There appeared to be little interest in expanding their HSR capacity; its major stated requirement was for short-term workshops to orient field officers to the basics of HSR in order to better manage their operations. The Health Education Bureau has made one or two forays into the HSR area - food consumption patterns, suicide, water and sanitation habits - but with only limited success due to difficulties in data analysis and time commitment from staff. They expressed a preference for contracting out their HSR requirements to external bodies like the Agragrian Research Institute or Marga Institute for Social Sciences. Their stated requirement was also for short-term workshops for field officer HSR training.

In addition to these ministerial, educational and health institutions, one further body was involved in HSR within a separate sector. The food and nurtition section of the ministry of plan implementation has undertaken nutrition surveillance activities and is anticipating evaluation of some nutritional interventions.

b) Resources

HSR funding is available on only a very limited basis within the country. NARESA has some funds available, some local governments have supported projects, but not surprisinly, external aid has been the source for most HSR.

Computer facilities are scattered and not readily available to all. NARESA has some central services available, some institutions have micro-computers (e.g. family health bureau) but many do not (e.g. the NIHS). Computer programmers are slowly being trained, but experienced statisticians and data analysts are in short supply and high demand, and this results in slow turnaround for data analysis on research projects. For example, we were told by researchers at

Peradeniya's department of community medicine that they had had to send the data from a 12,000 questionnaire study to Canada (University of Manitoba) for analysis. A further complication is the poor link between health researchers and the currently available statisticians in the Ministry of Agriculture, or in the census bureau of the ministry of plan implementation, or between health researchers and the social scientists and statisticians in the universities.

At the ministerial level there appear to be no civil servants with the sole (or even primary) task of developing and coordinating the HSR initiative. The abilities of the health and medical research standing committee to initiate HSR activities and of the ministry personnel to use HSR results, have been seriously comprimised by the absence of such supporting resources. The tendency has been for immediate "firefighting" activities within the ministry to take precedence over the more long-term initiative of HSR.

c) People

It is unfortunate that discussions were largely restricted to general research matters; the opportunity for appraisal of specific research skills and knowledge was limited. This precluded a comprehensive assessment of the current level of competence of researchers in the country. Nevertheless, some strengths and weaknesses could be identified.

Very few faculty (whether in the medical schools or at the NIHS) have had formal research training. Furthermore, those who are experienced in conducting research have no or only limited experience in field research. It is not surprising therefore, to find that many of the HSR projects are descriptive studies or, if evaluative, are of the relatively weak "before-after" design. The current level of HSR knowledge in Sri Lanka is such that much valuable information can be obtained from descriptive approaches, however an increase in research sophistication must be achieved in the future if investigations that

capitalize on the descriptive results are to be carried out.

Some specific individuals with both commitments to and competence in HSR were encountered. Professor T.E.J. de Fonseka at Colombo's department of community medicine had conducted a number of well designed studies on aspects of PHC, and furthermore he had disseminated results widely to faciliate utilization by ministry planners. Dr. N.W. Vidyasagara, assistance director of the family health bureau, manages a large number of HSR projects, the results of which will have direct implications for service organization. Finally, Professor P.E.P. Jayasena, head of pharmacology at Peradeniya Medical School in Kandy, used his experience as a successful pharmacology researcher to describe a detailed plan of development for HSR in Sri Lanka (this is included as Appendix 6).

Within the ministry of health, the director of health services, Dr. S.D.M. Fernando, would be the key individual in ensuring ongoing support for HSR and he appears very committed to its development. At the NIHS Dr. N.T. Cooray (who acted as coordinator of the IDRC/WHO visit) would be the most valuable contact.

4. CONSTRAINTS on the DEVELOPMENT of HEALTH SERVICES RESEARCH

In addition to constraints outlined in previous sections, the two primary constraints on HSR are - a) the absence of a focal point for the coordination of HSR activities and b) the state of current research manpower development.

a) Focal Point for HSR

The current standing committee on health and medical research does not serve as an adequate focal point because of its part-time nature, the absence of strong links with primary care and no effective links with the ministry of health. Hence, there has been no priority-setting exercises to guide HSR to initial projects. This problem is exacerbated by the absence of morbidity, mortality and service data on which to base such priority-setting. The absence of data may also be partly accounted for by the lack of any central coordinating body to

ensure uniform and appropriate data collection. For example, there has been a recent appraisal in one region of local health worker data collection which revealed that twenty-three separate registers had to be completed regularly; most of this data proved worthless and has now been supplanted by three. Nationwide introduction of this three register system is required. Furthermore, evidence that has been produced by HSR activities is not widely disseminated; neither formal journal publications nor distribution mechanisms for private publications are available (with the exception of the fledging Health Literature, Libraries and Information Services recently initiated by WHO). The existence of a rapid turn-over of senior officials in all government departments has led to inadequate continuity in HSR efforts, and can only be overcome by a high-profile formal structure with sole responsibility for HSR coordination.

b) Research Manpower Development

The recent record of Sri Lanka in retaining their trained physicians is very poor; in both 1981 and 1982 all their graduates left the country, providing a form of reverse aid to the middle east and the United Kingdom. Clearly there is a major problem for Sri Lanka to meet its service requirements from the physician sector, never mind meeting their research requirements. (This physician exodus was partly responsible for the formation of the medical faculty at the NIHS to train non-physician primary care workers in large numbers.) Retention of well trained physician researchers will present a major challenge to the Sri Lankan government.

At no centre that we visited were there significant numbers of health services researchers (or administrators adequately oriented to HSR) able to form a critical mass for self-reinforcing development. This isolation is not congruent with current research development models and impedes any attempts to develop adequate peer review mechanisms. The wheel is constantly reinvented as

isolated reserchers grapple with similar field research problems in separate locations.

The problems in Sri Lanka of structuring "protected time" for those interested in research are no different from those in other developing countries. At the university departments of community medicine both clinical and to a lesser extent teaching loads encroach on research time; at the NIHS teaching requirements overwhelm all other activities; at the other ministry bureaus (Family Health and Health Education) service demands are paramount; and within the ministry, the short-term demands of crisis management prevent protected research time. This problem is made worse because there are so few people with any specific HSR training that could used to justify protection of their time to perform exclusively (or near exclusively) HSR. Some community medicine faculty also expressed concern that the promotional criteria in the universities (e.g. quantity of publications) would not reward the relatively lengthy process of performing HSR compared (say) to laboratory research or clinical reseach. We were not in a position to judge the worth of this concern.

Future progress in HSR will have to be premised on better HSR training of current researchers and, at least as important, orientation to HSR of the administrators and department heads in their own institutions.

5. FUTURE DEVELOPMENT of HEALTH SERVICES RESEARCH

The country-wide nature of the proposed HSR programme and the degree to which requirements exceed project-specific funding, make collaborative involvement with WHO entirely appropriate. The following comments are therefore based on the assumption that such collaboration will proceed but do not attempt to draw neat lines between the appropriate funding targets for the two organizations.

Further development of HSR should include: establishment of an HSR

infrastructure that includes a coordinating focal body, a priority-setting exercise to identify areas for immediate HSR attention, workshops for orientation and training of the "users" of HSR, an HSR training program for specific researchers, and selected project funding.

a) Establishment of an HSR Infrastructure

Appendix 2 demonstrates the currently inadequate infrastructure for HSR. A coordinating body with some full-time staff and resources committed entirely to HSR is requred. "Coordination" would involve at leat the following ongoing functions: organisation of workshop and training activities; dissemination of HSR results and liaison with ministry planners for utilisation of HSR results; establishment of priority HSR areas; provision of data analysis; the ability to provide peer review and research consulting services; and to do, or have done, HSR on contract for client institutions.

The location of this coordinating body was the subject of much discussion during the site visit. At various times the health and medical research standing committee, the ministry's health services directorate, the NIHS, the departments of community medicine, and NARESA were all proposed as the appropriate location. The reasons against locating it directly within the ministry or ministerial structures have been outlined earlier; primarily there would be concern that it would become inundated with "firefighting" requests for short-term crises. NARESA did not demonstrate enough commitment to HSR to justify its use in this role. Selection of the departments of community medicine would have the advantages of: building on the current (limited) health research capability, involving physicians and physician training, providing access to social scientists and biostatistians. It would have the disadvantages of: having to select one of the four departments, lowering responsiveness to government priorities in HSR because of the quite justified desire for "academic freedom",

having greater orientation to hospital-based care rather than primary care. The final possible location is the NIHS which already has the mandate to advise the ministry on HSR. In addition to this advantage (and perhaps most importantly), the focus of NIHS is on primary care and its current research activities are exclusively HSR. However, it has only one statistical officer and no social scientists, faculty teaching commitments are extremely large, and some university jealousies might be generated by its selection.

Nevertheless I would recommend that a secretariat within the NIHS act as the HSR coordinating body, but that it be managed in overall direction by a board of directors with significant representation from departments of community medicine as well as from the ministry and other HSR-related institutions. This board of directors would function in place of the current health and medical research committee and members should be rewarded with a stipend for attendance. Inter-institutional jealousy from the universities might also be alleviated by having departments of community medicine as targets for faculty strengthening in HSR, enabling them to be a parallel site for the performance of HSR projects, although not responsible for the ongoing functions of the NIHS coordinating secretariat.

To perform this function the NIHS will require capital funding to establish the secretariat's physical plant (office space, computer, files etc.), funding allocations for secretariat staff (director, data analyst and support staff), faculty strengthening in HSR, the addition of social science faculty and a mechanism to protect faculty time for research. The director of the body should be a full-time health services researcher with credibility outside the NIHS to increase the profile in research and government circles. The provision of support services - data analysis, consultation for protocol development, publication and dissemination of results - should also increase the secretariat's

ability to successfully coordinate HSR.

b) Priority-Setting Exercise

Under the guidance of the board of directors the first task of the NIH secretariat should be to establish HSR priorities. This should involve two parallel processes. First, the involvement of all potentially interested parties (with particular emphasis on the minstry) in generating the priorities and thereby orienting them to HSR in general and the NIHS role in particular. Orientation workshops would be the most appropriate format for this exercise. (For more specifics of this process refer to section 3 of Appendix 6). Second, to review and analyse currently available data and make initial recommendations on priority HSR areas while also advising on general data collection requirements for the future. This latter exercise might quite justifiably be the first funded study of the collaborative HSR initiative.

c) Workshops and Training

It was clear from site visit discussions that three progressively more demanding forms of training in HSR are required: orientation for potential users, training for local officials to improve basic service management, training of faculty to undertake larger HSR studies.

As mentioned above, the orientation workshops can be combined with the priority-setting process and should emphasize both why and how to use HSR. The target groups should be both decision-makers who should/might use the results of HSR, as well as administrators who determine priority activities within their own institutions. This latter audience is of particular importance given the need for a sympathetic environment in which HSR can prosper. Anything for one to three day workshops will suffice depending on the audience, and they should be conducted by staff from the NIHS to emphasize their leadership role.

The next level would be training to provide the skills to do HSR as a

management tool, but would not involve protocol development and peer-review quality HSR. These workshops would answer to the need expressed by a number of facilities (Family Health Bureau, Health Education Bureau, Ministry's directorate of Health Services) to have better use and initiation of data collection on health services. The focus would be the analysis of relevant HSR questions brought to the workshops by the participants. At least one week would be required for these goals to be achieved and initially they could be conducted by external consultants although this should change to internal faculty as soon as possible.

Finally, there is the training of faculty-level health services researchers. This should be done under a "target-institutions" framework that will move towards building a critical mass of health services researchers in specific locations. The NIHS would obviously be one of these targets. Additionally, either one or two of the four departments of community medicine should be added, depending on the resources available for such training. The site visit did not produce enough information for me to advise on which departments would be appropriate.

The purpose of this training will be to establish a core of HSR faculty, not only capable of undertaking HSR of peer-review quality, but also able to attract other faculty into projects to facilitate their training in HSR. This method of domestic HSR training is preferred to the direct teaching model because of the dangers of externally-trained faculty's time being "drained off" into classroom activity.

Faculty cannot be expected to achieve this level of competence in HSR through short-term workshops; more protracted training outside the country is indicated. When officials were asked to state their needs for training, they generally responded with options taking three months or less. This is of some

concern because twelve months or more are required to train equivalent researchers in Canada, and there is no reason to believe that Sri Lankans will require any less time. On the contrary, they will likely require more than twleve months to be able to understand HSR themselves as well as have the ability to pass their knowledge on to others.

The number of faculty to be trained each year and in total is difficult to assess. Because of the immediate need for descriptive data, this activity could occupy the initial development period while the first wave are undergoing training. In order to significantly utilise the results of this descriptive data collection phase and to have a noticeable impact, it would be desirable to have at least four initial trainees (two from the NIHS and two from the department(s) of community medicine). The final number of faculty completing training would have to depend on the number of target institutions and the available funding. However, it would be necessary for each target institution to have representation from behavioural scientists, economists, statisticians, and epidemiologists as well as physicians and other primary care faculty. This would indicate a minimum of six faculty at each target institution. Mechanisms to encourage the retention of these trained faculty within Sri Lanka should also be developed.

Funding for this training is at least partly available at the present time for the NIHS. Under the current funding agreement with USAID, fellowships have been set aside for training at least one individual this year and another next year. WHO also stated that some fellowship funding might be available. (USAID has also expressed interest in purchasing a mini-computer for the NIHS). The selection of the appropriate external training institution(s) should be left for future discussion.

d) Selected Project Funding

The primary purpose of this site visit was to assess the HSR capacity of Sri

Lanka in general terms, therefore specific project appraisals did not occur. This will presumably be achieved during future visits by the IDRC. Nevertheless, should the IDRC wish to become significantly involved at an early stage in the HSR initiative in Sri Lanka without being too constrained by their project-specific funding mandate, the priority-setting exercise outlined earlier would be an excellent candidate for funding. Not only would it form the topic agenda for future HSR projects, but it could also lead to the country-wide data collection that would be the basis of further HSR investigations. The IDRC would obtain an assessment of HSR priorities from the study that would then be used in considering future project funding applications from Sri Lanka.

Additional project funding would have to depend (at least partly) on the chosen areas of the externally trained health services researchers. For this reason the IDRC might want to maintain significant liaison with the training institution(s) where, presumably, the trainees will develop their initial research protocols.

6. CONCLUSIONS

The appraisal of HSR in Sri Lanka was obviously limited by the fact that the agenda for discussions was established by the Sri Lankans, and that with only one week for discussions there was no opportunity for detailed examination. Nevertheless, I was impressed by both the need for HSR and the commitment of Sri Lankans to the development of HSR. This site visit report has been more negative than might have been expected, given this endorsement. However, this reflects the purpose of the report, which was to identify problem areas and constraints that can be addressed by the IDRC, WHO and the Sri Lankans themselves.

While the proposals made in the previous section are quite extensive, they reflect the fact that there is little point in funding isloated HSR projects without having mechanisms in place to ensure: 1) that HSR activity is in priority

areas, and 2) that the results of HSR are useful to the health care system and have a high probability of being utilized in health care decision-making. This raises a general issue that might be worthy of discussion by the IDRC - the appropriateness of a restricted project-specific funding mandate for health services (or operations) research. HSR is to be distinguished from most other health-related research in its high dependence on government cooperation and commitment and its relatively new status in the developing world, and thus might require additional consideration beyond the usual mechanisms applied to purely clinical investigations.